

Voltammetric Behavior of Glucose and Other Carbohydrates on Metal Electrodes

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Abstract

The potential ranges of catalytic oxidation of glucose and some other carbohydrates on copper, silver, nickel, cobalt, and gold electrodes were determined, and possible schemes of electrochemical and chemical reactions were proposed. The ranges of the linear dependence of the current on the glucose concentration were established, and the possibility was shown of voltammetric determination of glucose in model solutions and human blood serum.
